Livestock Transportation Costs in West Virginia

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CONTENTS

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SUMMARY AND CONCLUSIONS

The two most popular truck sizes used in West Virginia for transporting ock are the 1/2-ton and 1 1/2-ton sizes. The average transportation costs esized in this study were based on these two truck sizes. A major objective is study was to estimate, under varying transportation situations, the total per animal unit per mile for transporting livestock by new 1/2-ton and 2-ton trucks and by used 1 1/2-ton trucks. The results of this analysis were nted so that individual farmers could compare their actual trucking costs e operating costs of "efficient" model trucks derived in this study. Another tive of this study was to determine the most economical means of transng livestock for specified numbers of annual miles driven under different portation situations in the State.

The procedure used to accomplish these objectives was synthetic cost sis or economic engineering. Data used in this study were based on mation obtained from farmers, local truck dealers, local insurance comes, West Virginia University Agricultural Experiment Station, the Depart- of Motor Vehicles, the State Tax Commissioner, and existing publications hicle costs and livestock transportation.

In order to present the cost data synthesized in this study in a manner h facilitates cost comparisons to different actual transportation situations, cost per animal unit per mile was estimated on the basis of three variables. e variables were: (1) miles driven annually; (2) the number of months of utilization; and (3) the number of animal units transported.

Due to the seasonal nature of livestock marketing, most animals are ported to market only during a three-month period each year. Therefore, ing costs based on two assumptions were examined. First, costs were ed based on the assumption that the trucks would be used for other farm oses during the off months, and second, they were derived with the nption that the truck would only be utilized for livestock transportation. age trucking cost was then considered on the basis of the number of animal transported per mile. An "animal unit" was used here to convert the rent species of animals transported (cattle, calves, hogs, sheep and lambs) a uniform common denominator. One animal unit was equivalent to one le," two calves, four hogs, or four sheep or lambs. This ratio was based on pace requirements of each animal species.

The study indicated the annual fixed cost for operating a 1/2-ton truck was .33 and for operating a 1 1/2-ton truck was $854.45. The fixed cost items dered were depreciation, insurance, interest, a license fee, and property tax. eciation was the largest component of fixed costs for each of the truck

The variable cost was calculated on a per-mile basis and it was assumed the ble cost per mile would remain constant regardless of the number of annual driven. Variable cost per mile was 9.94 cents for the 1/2-ton truck and

12.74 cents for the 1 1/2-ton truck. The variable cost items included gaso e, oil, oil filter, air cleaner, grease, tires, repairs and maintenance, and labor. L or and gasoline were the largest components of variable cost per mile for l th model trucks.

Total cost per animal unit per mile is the sum of the total fixed cost anc ne total variable cost per animal unit per mile. Total fixed cost per animal unit er mile was obtained by dividing annual fixed cost by selected annual mileages xd by the number of animal units transported. Total variable cost per animal it per mile was obtained by dividing variable cost per mile by the number of an al units transported.

Under the assumption that trucks were used for other purposes during ne off months, the total cost per animal unit per mile of the 1/2-ton truck was !5 cents for transporting two animal units (full capacity of 1/2-ton truck) t ee months per year for 20,000 annual miles. Under the same use conditions, ne total cost per animal unit per mile was 6.91 cents for the 1 1/2-ton tr k. However, when the 1 1/2-ton truck was operated at full capacity (ten an al units) for three months per year traveling 6,000 annual miles, the total coste animal unit per mile was 1.63 cents.

When the trucks were not used for other purposes during the off mor s, the number of months of truck utilization was not a necessary consideratio x average cost analysis. Since the total fixed costs could only be attributed to ne livestock enterprise they remained the same regardless of the number of mo ns of use. The total cost per animal unit per mile was 6.89 cents for transpo g two animal units by a new 1/2-ton truck for 20,000 annual miles. Under ne same use conditions, the cost was 8.51 cents using a new 1 1/2-ton truck. W n ten animal units are hauled by the 1 1/2-ton truck for 6,000 annual miles, ne total cost per animal unit per mile is 2.70 cents assuming the truck is used c y for livestock transportation.

The more economical of the two trucks was determined under ne assumption that the truck was used three months per year for livest k transportation and for other purposes during the off-months. The 1/2-ton tr k was more economical than the 1 1/2-ton truck for transporting 20 animal uts or less a round-trip distance of 40 miles or less. The 1 1/2-ton model truck c the cost advantage for greater number of animal units transported gre t distances. This evaluation took into effect the necessity of multiple trips to e destination since a 1/2-ton truck for example, must make five round trip order to carry ten animal units to a particular destination.

Many livestock producers operate used trucks. Therefore, average cos owning and operating used trucks in the State was examined. This cost anal s was limited to the 1 1/2-ton truck because the used 1 1/2-ton truck was fo d to be more popular than the used 1/2-ton truck. Four different ages of use 1/2-ton trucks (one, three, five, and seven years old), which were assumed to e utilized for other purposes during the off months, were considered in this stu .

total cost per animal unit per mile for a used 1 1/2-ton truck transporting animal units 6,000 miles per year and which was used for other purposes ng the off months ranged from 1.56 cents for a one-year-old truck to 1.52 s, 1.45 cents, and 1.42 cents for three-, five-, and seven-year-old trucks, ectively.

Three general conclusions can be made from the results of this study: (1) l cost per animal unit per mile decreased at a decreasing rate as annual ages increased; (2) total cost per animal unit per mile increased constantly as period of truck utilization increased each additional month with annual age remaining the same, and (3) total cost per animal unit per mile decreased he number of animal units transported increased.

The costs incurred for the model trucks in this study appeared to be quite according to evaluations by several livestock producers and Experiment ion personnel. They were determined, however, based on actual efficient ating conditions in the State. If the synthesized costs derived in this study ndicative of actual costs incurred by livestock producers in West Virginia a aluation of farm management practices may be in order.

A large percentage of the livestock producers in the State are small in terms vestock sold annually. This study showed that transportation costs incurred small-volume producers account for a substantial portion of the margin ween production cost and the selling price of livestock. This high transporta- cost is probably the reason for the use of private trucking companies rather farmer-owned livestock transportation, especially by the small-volume and -time farmers. It appears that the small-volume livestock producers will have ontinue hiring outside truckers until they become large enough, in terms of tock produced annually, to economically support their own transportation ities.

This study has provided detailed average cost data for transporting livestock r varying transportation situations in West Virginia. The results of this study ld be useful for determining the optimum means of transporting livestock r different marketing conditions. These results should also be useful for idual livestock producers and marketing institutions in improving their omic well-being.

ivestock Transportation Costs In West Virginia

CHEN-FEN LIN AND JOHN P. KUEHN

Transportation plays a key role in the modern marketing sector of the ıgcultural economy. Kohls said: "Adequate and efficient transportation is a :ıerstone of our modern marketing system. The wide variety of food available nour grocery stores at all times of the year would not be possible without nlern transportation."[1] He also emphasized that transportation factors could nıence the sizes of market areas and the expansion of the potential market ir for agricultural products.[2]

"Trucks made their first mark in agricultural transportation by the n ement of products from farms to initial markets. With the development of mroved farm-to-market roads and the widespread ownership of trucks by aıers, trucking rapidly took over the greater part of the agricultural rısportation job." Rail transportation is still used in the movement of fresh nıt, frozen and fresh fruits and vegetables, and grain, but the diversion of ıness from rail to trucks apparently is still occurring.[3]

Trucks are now the dominant means of transporting livestock in the United ıtes. In 1969 98.4 per cent of total receipts for cattle, 100 per cent of total eıpts for hogs, and 96.6 per cent of total receipts for sheep and lambs at nır markets were delivered by trucks.[4]

Capener and others[5] studied cattle transportation in the western United ıtes. They indicated that: "That largest cost in marketing cattle is transoation. It represents an even larger part of marketing costs in the West than in tlr parts of the United States because of the greater distances cattle are nıed to market."[6] They also outlined the following "specific advantages of rk transportation":

(1) Nearly all areas in the United States, including most cattle ranches, are accessible to trucks; (2) the livestock shipper can own all or

[1]Richard L. Kohls, *Marketing of Agricultural Products* (third edition: New York: The lamillan Company, 1967), p. 302.

[2]*Ibid.*

[3]*Ibid.*, p. 303.

[4]Automobile Manufacturers Association, *1971 Motor Truck Facts* (Detroit, Michigan: umobile Manufacturers Association, Inc., 1971), p. 39.

[5]William N. Capener, *et al., Transportation of Cattle in the West,* Agricultural xıriment Station, Research Journal 25 (Laramie, Wyoming: University of Wyoming, arıry, 1969).

[6]*Ibid.*, p. 3.

part of the trucking equipment he uses, or he can hire commercial truckers as he needs them; (3) truck transportation reduces handling since livestock can be shipped on the same truck from their point of origin directly to their destination; (4) trucks usually are available almost anytime needed and on very short notice; (5) livestock spend less time in transit and as a result incur less shrinkage, and have a lower incidence of injury and death loss; (6) greater flexibility in the size of load is provided by trucks because trucks come in many sizes.[7]

OBJECTIVES

Due to the importance of livestock transportation as a portion of the stock marketing bill and to the importance of livestock marketing in the stat West Virginia, the overall objective of this study was to evaluate the econo of farm transportation of livestock in West Virginia.

The specific objectives of this study were: (1) to synthesize estimates of annual fixed costs and the variable costs per mile of driving 1/2-ton ar 1/2-ton trucks in the State; (2) to synthetically determine the total cost animal unit per mile for new and used trucks transporting livestock in V Virginia under varying transport situations; and (3) to find the most econon means of livestock transportation in West Virginia over specified lengths of under varying marketing conditions. This study should be advantageous prospective new farmers as well as for those presently engaged in livest marketing in West Virginia. The derived efficient data are presented so farmers can make comparisons with actual operating costs.

COST ESTIMATION

The synthetic method of cost analysis was used to estimate annual truck costs in this study. The total cost of transporting livestock by trucks is the of fixed and variable costs. "Fixed costs result from ownership alone and wil incurred whether the truck is operated or not."[8] In this study fixed c included depreciation, insurance, interest, a license fee, and property Variable costs depend on the number of miles driven and include such iten labor, gasoline, oil, oil filter, air cleaner, grease, repairs and maintenance, tires.

Truck Prices

The purchase price of a new truck will influence the transportation c This influence will be shown in the form of depreciation, interest, and o costs.

According to interviews with livestock farmers in West Virginia, the r popular truck used in the State is the 1/2-ton pickup. The most common la

[7] *Ibid.*, p. 8.

[8] Daniel F. Capstick, *Cost of Owning and Operating Farm Trucks in Eastern Arka* University of Arkansas, Agricultural Experiment Station, Bulletin 639 (Fayett Arkansas: University of Arkansas, April, 1961), p. 4.

is the 1 1/2-ton chassis cab. Also, certain extra equipment is necessary for porting livestock safely, according to the interviews. These extras include a ngine and a wooden rack for 1/2-ton trucks and a V-8 engine, wooden rack, ooden platform for 1 1/2-ton trucks.

The costs estimated in this study were for new trucks and equipment. Cost were based on information from the *Truck Blue Book* and from truck body actors. A 1970 Chevrolet pickup with a gross vehicle weight ranging from pounds to 5,800 pounds was considered as the 1/2-ton truck model to be in this study. The investment cost of this truck was estimated to be 9[9] which included the factory price of $2,589 plus $160 for the V-8 e and $150 for building a wooden rack to enclose the livestock on the . The 1970 Chevrolet chassis cab with a gross vehicle weight ranging from 0 pounds to 24,000 pounds was assumed to be the 1 1/2-ton truck dered in this study. The total investment cost was estimated to be $4,810 included a factory price of $3,875, $360 for the V-8 engine, $250 for the en rack, and $325 for building a wooden platform.[10]

Costs

otal fixed costs include charges for depreciation, insurance, interest, e fee, and property tax. Cost figures are presented in Table 1.

epreciation. The useful life of the 1/2-ton and the 1 1/2-ton trucks was ed to be four years and 12 years, respectively.[11] Annual depreciation was ited to be 17.0 per cent of the factory price for the 1/2-ton truck and 7.8 nt for the 1 1/2-ton truck.[12] Annual depreciation cost for the 1/2-ton was $492.83 per year, and for the 1 1/2-ton truck $376.14.

surance. The annual insurance cost was obtained from telephone ews with several local insurance agencies in Morgantown, West Virginia. ates used were found to be indicative of rates throughout the State. The nce coverage used in this study included personal and property liability, al payments, uninsured motorist, collision, and comprehensive. For the n truck the annual insurance cost was $104.60, and for the 1 1/2-ton $135.40.

terest. Annual interest was computed on the basis of the truck's mid-life which is the half-value of the truck investment cost. The prime bankers'

The truck costs estimated in this study did not include delivery charge or sales tax.

The data for gross vehicle weight, truck factory price, and the cost of the V-8 engine aken from: *Truck Blue Book,* Official Used Truck Valuations, Effective January 30, 1971. The costs of wooden rack and of wooden platform were obtained from ws with a truck body contractor in Goffs, West Virginia.

Capstick, *op. cit.,* pp. 6-7.

Computed from Capstick, *op. cit.,* pp. 17 and 20. A 1/2-ton truck with a four-year life depreciated $357 per year. The new truck cost was $2,100. The annual ation percentage was $357 divided by $2,100 = 17 per cent. For a 1 1/2-ton truck 2-year use life the annual depreciation cost was $223. The annual depreciation age of the truck factory price was $233 divided by $2,850 = 7.82 per cent.

TABLE 1

Estimated Annual Fixed Costs for 1/2-Ton and for 1 1/2-Ton Trucks Used for Transporting Livestock in West Virginia, 1970

Fixed Cost Items	Truck Size	
	1/2 Ton	1 1/2 Ton
Depreciation[a]	$492.83	$376.14
Insurance[b]	104.60	135.40
Interest[c]	110.16	182.78
License Fee[d]	22.50	100.00
Property Tax[e]	36.24	60.13
Total Fixed Cost	$766.33	$854.45

[a] Computed on the basis of new truck factory price at an annual depreciation percent 17.0 per cent for 1/2-ton truck and 7.8 per cent for 1 1/2-ton truck. Source: Com from Daniel F. Capstick, *Cost of Owning and Operating Farm Trucks in Eastern Ark* University of Arkansas Agricultural Experiment Station, Bulletin 639 (Fayett Arkansas: University of Arkansas, April, 1961), pp. 17 and 20. The new truck fa price was $2,899 for 1/2-ton truck and $4,810 for 1 1/2-ton truck. Source: *Truck Book,* Official Used Truck Valuation, Effective January 1-June 30, 1971.

[b] Annual insurance costs were obtained from a local insurance agency in Morgantown Virginia, on the basis of following insurance coverages:
(a) Personal and property liability — 100/300/50
(b) Medical payment — $2,000
(c) Uninsured motorist — $10,000 for one person
Uninsured motorist — $20,000 for two persons
(d) Collision — $100 deductible
(e) Comprehensive — full coverage

[c] Annual interest was computed at a rate of 7.6 per cent on the basis of mid-life value trucks.

[d] License fees were computed on the basis of gross vehicle weight ranging from pounds to 8,000 pounds for 1/2-ton truck and 19,500 pounds for 1 1/2-ton truck. S *Schedule of Motor Vehicle Fees for All Classes,* State of West Virginia, John M. Commissioner, Department of Motor Vehicles, Effective July 1, 1970.

[e] Computed on basis of mid-life value of trucks at a tax rate of $2.50 per $100 app value. Source: Data from State of West Virginia, Charles H. Haden II, Tax Commiss

ptances rate in March 1970 of 7.6 per cent was used to determine the annual rest cost for the trucks in this study.[13] The annual interest for the 1/2-ton k was $110.16, and $182.78 for the 1 1/2-ton truck.

License fee. The annual fee for a B-class[14] license for the 1/2-ton truck was .50 which was based on the assumed gross vehicle weight ranging from 4,001 nds to 8,000 pounds. The average gross vehicle weight of the 1 1/2-ton truck idered in this study was 19,500 pounds and according to this weight the ass license fee was $100 annually.[15]

Property tax. The property taxes were calculated at a tax rate of $2.50 per 0 of appraised value.[16] The appraised value was assumed to be the mid-life e of the truck. The annual property tax was calculated to be $36.24 for the ton truck and $60.13 for the 1 1/2-ton truck.

Total fixed cost per year does not change as the number of miles driven ges. The total annual fixed costs synthesized for the 1/2-ton truck and for 1 1/2-ton truck were $766.33 and $854.45, respectively. Depreciation was largest component of fixed costs for each of the trucks. Interest and rance were the second and the third largest cost components.

able Costs

Variable costs included gasoline, oil, oil filter, air cleaner, grease, tires, irs and maintenance, and labor. The variable costs estimated for operating ton trucks and 1 1/2-ton trucks in West Virginia are presented in Table 2. retail cost of gasoline was obtained through interviews with wholesale line distributors in West Virginia. The costs of oil, oil filter, air cleaner, e, tires, and repairs and maintenance were obtained from published sources ransportation costs. Labor costs were obtained from the Farm Labor report pril 1970[17] and from various research projects.

The variable costs were calculated on a per-mile basis and it was assumed the ble cost per mile would remain constant regardless of the number of annual s driven. Variable cost per mile was 9.94 cents for the 1/2-ton truck and 4 cents for the 1 1/2-ton model (Table 3). Labor and gasoline were the st components of variable cost per mile for the two truck sizes studied. , and repairs and maintenance were the third and the fourth largest variable components.

[13]United States Department of Commerce, *Statistical Abstract of the United States* . Bureau of the Census (Washington: U. S. Government Printing Office, 1970), p. 453.

[14]Class B vehicles are classified as motor vehicles designated as trucks, truck tractors, or tractors other than those leased or operated for compensation.

[15]*Schedule of Motor Vehicle Fees for All Classes,* State of West Virginia, John M. , Commissioner, Department of Motor Vehicles, Effective July 1, 1970.

[16]Source: Data from Charles H. Haden II, Tax Commissioner, State of West Virginia.

[17]U. S. Department of Agriculture, *Farm Labor,* Statistical Reporting Service, La 1). Washington: April, 1970.

TABLE 2

Estimated Variable Cost For Operating 1/2-Ton Trucks and 1 1/2-Ton Trucks In West Virginia, 1970

Cost Items	Truck Size	
	1/2-Ton	1 1/2-Ton
Gasoline		
Price per gallon (cents)[a]	37.90	37.90
Miles per gallon[b]	12	8
Oil		
Quarts per 4,000 miles[b]	6	7
Price per quart (cents)[a]	85.00	85.00
Oil Filter		
Frequency of change (miles)[b]	8,000	8,000
Cost per filter (dollars)[a]	3.00	3.00
Air Cleaner		
Frequency of change (miles)[a]	6,000	6,000
Cost per cleaner (dollars)[a]	5.70	5.70
Grease		
Frequency of greasing (miles)[b]	2,000	2,000
Cost of greasing (dollars)[b]	1.50	1.50
Tires		
Cost per mile (cents)[b]	1.00	1.75
Repairs & Maintenance		
Cost per mile (cents)[b]	1.00	1.37
Labor		
Cost per hour (dollars)[c]	1.66	1.66
Miles driven per hour[d]	37.3	37.3

[a] From interviews with wholesale gasoline distributors in West Virginia.

[b] Adjusted from Robert L. Jack and Ahmad Abdul Kader, *Cost of Collecting Eggs f Farms by Firms Located in West Virginia,* West Virginia University Agricult Experiment Station, Bulletin 571 (Morgantown, West Virginia: West Virginia Univer February, 1969), p. 35.

[c] Source: U. S. Department of Agriculture, *Farm Labor,* Statistical Reporting Service, (4-70). (Washington: April, 1970).

[d] Source: H. C. Kriesel, *Factors Affecting the Competitive Position of the Poultry Indu in West Virginia and in Other Regions,* West Virginia University Agricultural Experir Station, Bulletin 529T (Morgantown, West Virginia: West Virginia University, June, 19 p. 28.

TABLE 3

Estimated Variable Cost Per Mile For Transporting Livestock by 1/2-Ton and 1 1/2-Ton Trucks in West Virginia, 1970[a]

Items	Truck Size	
	1/2 Ton	1 1/2 Ton
	cents per mile	
oline	3.1580	4.7380
	0.1280	0.1490
Filter	0.0375	0.0375
Cleaner	0.0950	0.0950
ise	0.0750	0.1500
s	1.0000	1.7500
airs & Maintenance	1.0000	1.3700
or	4.4500	4.4500
al Cost per Mile	9.9435	12.7395

ırce: Computed from Table 2.

COST ANALYSIS

Efficiency and costs of transportation are of interest to all farmers sporting livestock. Capstick said: "Cost per mile is the typical method of suring economy of automotive vehicle operation."[18] In this section total per animal unit per mile for new and used trucks transporting livestock in Virginia will be analyzed. Because farmers transport different species of ials, a common "animal unit" was used to facilitate average cost comparis. Kuehn noted that: " . . . an animal unit consisted of one 'cattle' or two es, or four hogs, or four sheep or lambs. This ratio was based on the space irement of cattle of 20 square feet each, calves ten square feet each, and , sheep and lambs five square feet each."[19] Farmers should be able to pare the actual total cost per animal unit per mile for transporting livestock heir own trucks to the average cost incurred by the "efficient" model trucks nesized in this study over selected annual mileages and different marketing tions.

[8]Capstick, *op. cit.*, p.9

[9]John P. Kuehn, *Costs and Efficiencies of Model Livestock Auctions in West Virginia,* Virginia University, Agricultural Experiment Station, Bulletin 606 (Morgantown, West nia: West Virginia University, December, 1971), p. 6.

THE COST OF OWNING AND OPERATING NEW TRUCKS

According to interviews with local truck dealers and farmers, a full loa full capacity of a 1/2-ton truck is two animal units and the full capacity of 1/2-ton truck is ten animal units. Since livestock marketing in West Virgini extremely seasonal,[20] the utilization of trucks is concentrated in the p marketing period. Wilson and Kuehn recorded that: "The peak sales period the ruminants (cattle, calves, and sheep and lambs) occurred in the month September, October, and November. By contrast, hogs maintained a relati even market flow throughout the year."[21]

Truck costs were analyzed in this study under two different assumptions

(1) Trucks were utilized for other purposes during the off months (w few if any animals are marketed). This assumption had the effect of spreac out the fixed costs over a 12-month period while livestock were only transpor during a two-or three-month period.

(2) Trucks were only used for transporting livestock and would not be u for other purposes during the off months.

In this study, total cost per animal unit per mile for transporting livest by 1/2-ton and 1 1/2-ton trucks was analyzed based on three variables: (1) m driven annually to transport livestock to market; (2) the number of month utilization; and (3) the number of animal units transported.

Half-Ton Trucks

Trucks utilized during the off months. Normally, 1/2-ton trucks were dri an average of about 20,000 miles per year.[22] As described before, the p marketing period for cattle, calves, and sheep and lambs was a three-mo period in the late summer and fall. Under these use conditions, the total cost animal unit per mile was 10.90 cents for transporting one animal unit or 5 cents for transporting two animal units (Tables 4 and 5). If the truck was utilized for other purposes during the remaining months, with an equival 20,000 annual miles, the total cost would increase to 13.77 cents per animal u per mile for transporting one animal unit or 6.89 cents per animal unit per m for transporting two animal units. Tables 4 and 5 indicate that total cost animal unit per mile will increase constantly as the period of truck utilization livestock transportation increases an additional month with annual mile remaining the same.

[20]For a more complete discussion of the seasonal variations in livestock marketin West Virginia, see E. Maclellan Wilson and John P. Kuehn, *A Cost Analysis of the Livest Auction Markets in West Virginia,* West Virginia University Agricultural Experiment Stat Bulletin 600T (Morgantown, West Virginia: West Virginia University, April, 1971), 21-23.

[21] *Ibid.,* p. 21.

[22]Capstick, *op. cit.,* p. 9.

Periods of One Through Twelve Months Over Selected Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization											
	1	2	3	4	5	6	7	8	9	10	11	12
	cents											
500	22.71	35.48	48.26	61.03	73.80	86.57	99.35	112.12	124.89	137.66	150.43	163.21
1,000	16.33	22.71	29.10	35.48	41.87	48.26	54.64	61.03	67.41	73.80	80.19	86.57
1,500	14.20	18.45	22.71	26.97	31.23	35.48	39.74	44.00	48.26	52.51	56.77	61.03
2,000	13.13	16.33	19.52	22.71	25.91	29.10	32.29	35.48	38.68	41.87	45.06	48.26
4,000	11.54	13.13	14.73	16.33	17.92	19.52	21.12	22.71	24.31	25.91	27.50	29.10
6,000	11.00	12.07	13.13	14.20	15.26	16.33	17.39	18.45	19.52	20.58	21.65	22.71
8,000	10.74	11.54	12.33	13.13	13.93	14.73	15.53	16.33	17.12	17.92	18.72	19.52
10,000	10.58	11.22	11.86	12.49	13.13	13.77	14.41	15.05	15.69	16.33	16.96	17.60
12,000	10.47	11.00	11.54	12.07	12.60	13.13	13.67	14.20	14.73	15.26	15.79	16.33
14,000	10.40	10.85	11.31	11.76	12.22	12.68	13.13	13.59	14.05	14.50	14.96	15.41
16,000	10.34	10.74	11.14	11.54	11.94	12.33	12.73	13.13	13.53	13.93	14.33	14.73
18,000	10.29	10.65	11.00	11.36	11.71	12.07	12.42	12.78	13.13	13.49	13.84	14.20
20,000	10.26	10.58	10.90	11.22	11.54	11.86	12.18	12.49	12.81	13.13	13.45	13.77
22,000	10.23	10.52	10.81	11.10	11.39	11.68	11.97	12.26	12.55	12.84	13.13	13.42
24,000	10.21	10.47	10.74	11.00	11.27	11.54	11.80	12.07	12.33	12.60	12.87	13.13
26,000	10.19	10.43	10.68	10.92	11.17	11.41	11.66	11.90	12.15	12.40	12.64	12.89
28,000	10.17	10.40	10.62	10.85	11.08	11.31	11.54	11.76	11.99	12.22	12.45	12.68
30,000	10.15	10.37	10.58	10.79	11.00	11.22	11.44	11.64	11.86	12.07	12.28	12.49
35,000	10.12	10.30	10.49	10.67	10.85	11.03	11.22	11.40	11.58	11.76	11.95	12.13
40,000	10.10	10.26	10.42	10.58	10.74	10.90	11.06	11.22	11.38	11.54	11.70	11.86
45,000	10.08	10.22	10.37	10.51	10.65	10.79	10.93	11.08	11.22	11.36	11.50	11.64

[a] Assuming the truck will be utilized for other uses during off months. Source: Computed from Tables 1 and 3.

TABLE 5

Total Costs Per Animal-Unit-Mile for A 1/2-Ton Truck Transporting Two Animal Units of Livestock for Periods of One Through Twelve Months Over Selected Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization											
	1	2	3	4	5	6	7	8	9	10	11	12
	cents											
500	11.36	17.74	24.13	30.52	36.90	43.29	49.68	56.06	62.45	68.83	75.22	81.61
1,000	8.17	11.36	14.55	17.74	20.94	25.13	27.32	30.52	33.71	36.90	40.10	43.29
1,500	7.10	9.23	11.36	13.49	15.62	17.74	19.87	22.00	24.13	26.26	28.39	30.52
2,000	6.57	8.17	9.76	11.36	12.96	14.55	16.15	17.74	19.34	20.94	22.53	24.13
4,000	5.77	6.57	7.37	8.17	8.96	9.76	10.56	11.36	12.16	12.96	13.75	14.55
6,000	5.50	6.04	6.57	7.10	7.63	8.17	8.70	9.23	9.76	10.29	10.83	11.36
8,000	5.37	5.77	6.17	6.57	6.97	7.37	7.77	8.17	8.56	8.96	9.36	9.76
10,000	5.29	5.61	5.93	6.25	6.57	6.89	7.21	7.53	7.85	8.17	8.48	8.80
12,000	5.24	5.50	5.77	6.04	6.30	6.57	6.84	7.10	7.37	7.63	7.90	8.17
14,000	5.20	5.43	5.66	5.88	6.11	6.34	6.57	6.80	7.03	7.25	7.48	7.71
16,000	5.17	5.37	5.57	5.77	5.97	6.17	6.37	6.57	6.77	6.97	7.17	7.37
18,000	5.15	5.33	5.50	5.68	5.86	6.04	6.21	6.39	6.57	6.75	6.92	7.10
20,000	5.13	5.29	5.45	5.61	5.77	5.93	6.09	6.25	6.41	6.57	6.73	6.89
22,000	5.12	5.26	5.41	5.55	5.70	5.84	5.99	6.13	6.28	6.42	6.57	6.71
24,000	5.11	5.24	5.37	5.50	5.64	5.77	5.90	6.04	6.17	6.30	6.44	6.57
26,000	5.10	5.22	5.34	5.46	5.59	5.71	5.83	5.95	6.08	6.20	6.32	6.45
28,000	5.09	5.20	5.31	5.43	5.54	5.66	5.77	5.88	6.00	6.11	6.23	6.34
30,000	5.08	5.19	5.29	5.40	5.50	5.61	5.72	5.82	5.93	6.04	6.14	6.25
35,000	5.06	5.15	5.25	5.34	5.43	5.52	5.61	5.70	5.79	5.88	5.98	6.07
40,000	5.05	5.13	5.21	5.29	5.37	5.45	5.53	5.61	5.69	5.77	5.85	5.93

The tables also indicate that total cost per animal unit per mile will decline ne number of annual miles increases. When the model trucks were utilized e months per year to transport two animal units per trip, the total cost per nal unit per mile decreased from 14.55 cents for 1,000 annual miles to 5.37 s for 24,000 annual miles. It should be noted here that although the cost per nal unit per mile was lower for longer hauls, the total cost would be higher armers transporting livestock to markets at a greater distance.

Trucks not utilized during the off months. If the truck was not used for r purposes during the off months, the number of months of utilization d not be a variable considered for average cost analysis. Since the total fixed s could only be attributed to the livestock enterprise they remained the same rdless of the number of months of use. In this case, average cost would only due to varying numbers of miles driven and animal units transported.

2-Ton Trucks

Trucks utilized during the off months. The 1 1/2-ton trucks were assumed e driven an average of 6,000 miles per year.[23] If a 1 1/2-ton truck was ated three months per year to transport ten animal units (full capacity of 1 ton trucks) 6,000 annual miles, the total cost per animal unit per mile ld be 1.63 cents (Table 6). Total cost per animal unit per mile decreased as total number of miles driven increased. However, these average costs eased at a decreasing rate as the annual mileage increased. Total cost per al unit per mile ranged from 5.55 cents for a truck driven 500 miles per to 1.35 cents for a truck driven 30,000 annual miles at full capacity.

If the truck was used for 12 months rather than three months per year for porting livestock with a total annual mileage of 6,000 miles, total cost per nal unit per mile would increase from 1.63 to 2.70 cents. Total cost per al unit per mile ranged from 1.39 cents for one month of use per year to cents for 12 months of use. The increase in average cost was constant for additional month of utilization.

Total cost per animal unit per mile for transporting two, four, six, and eight al units by 1 1/2-ton trucks is presented in Appendix Tables 1 through 4. l cost per animal unit per mile decreased as the number of animal units ported increased. This reduction in average cost was proportional to the ase in the number of animal units transported.

Trucks not utilized during the off months. As described in the section on on trucks, only two variables were considered: annual mileage and the ber of animal units transported. Total costs per animal unit per mile for porting livestock by 1 1/2-ton trucks which were not utilized during the off ths, are presented in Table 7. If a 1 1/2-ton truck was driven 6,000 miles per to transport ten animal units, the total cost per animal unit per mile would .70 cents. The average cost would increase to 4.50 cents if the number of al units transported decreased to six.

[23] *Id.*, p. 12.

TABLE 6

Total Costs Per Animal-Unit-Mile for A 1 1/2-Ton Truck Transporting Ten Animal Units of Livestock for Periods of One Through Twelve Months Over Selected Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization											
	1	2	3	4	5	6	7	8	9	10	11	12
							cents					
500	2.70	4.12	5.55	6.97	8.39	9.82	11.24	12.67	14.09	15.52	16.94	18.36
1,000	1.99	2.70	3.41	4.12	4.83	5.55	6.26	6.97	7.68	8.39	9.11	9.82
1,500	1.75	2.22	2.70	3.17	3.65	4.12	4.60	5.07	5.55	6.02	6.50	6.97
2,000	1.63	1.99	2.34	2.70	3.05	3.41	3.77	4.12	4.48	4.83	5.19	5.55
4,000	1.45	1.63	1.81	1.99	2.16	2.34	2.52	2.70	2.88	3.05	3.23	3.41
6,000	1.39	1.51	1.63	1.75	1.87	1.99	2.11	2.22	2.34	2.46	2.58	2.70
8,000	1.36	1.45	1.54	1.63	1.72	1.81	1.90	1.99	2.08	2.16	2.25	2.34
10,000	1.35	1.42	1.49	1.56	1.63	1.70	1.77	1.84	1.92	1.99	2.06	2.13
12,000	1.33	1.39	1.45	1.51	1.57	1.63	1.69	1.75	1.81	1.87	1.93	1.99
14,000	1.33	1.38	1.43	1.48	1.53	1.58	1.63	1.68	1.73	1.78	1.83	1.88
16,000	1.32	1.36	1.41	1.45	1.50	1.54	1.59	1.63	1.68	1.72	1.76	1.81
18,000	1.31	1.35	1.39	1.43	1.47	1.51	1.55	1.59	1.63	1.67	1.71	1.75
20,000	1.31	1.35	1.38	1.42	1.45	1.49	1.52	1.56	1.59	1.63	1.67	1.70
22,000	1.31	1.34	1.37	1.40	1.44	1.47	1.50	1.53	1.57	1.60	1.63	1.66
24,000	1.30	1.33	1.36	1.39	1.42	1.45	1.48	1.51	1.54	1.57	1.60	1.63
26,000	1.30	1.33	1.36	1.38	1.41	1.44	1.47	1.49	1.52	1.55	1.58	1.60
28,000	1.30	1.33	1.35	1.38	1.40	1.43	1.45	1.48	1.50	1.53	1.55	1.58
30,000	1.30	1.33	1.35	1.37	1.39	1.42	1.44	1.46	1.48	1.51	1.53	1.56

TABLE 7

Total Costs Per Animal-Unit-Mile for A 1 1/2-Ton Truck Transporting Specified Numbers of Animal Units Over Selected Annual Mileages, West Virginia, 1970[a]

l Miles en Annually sporting stock	Number of Animal Units				
	2	4	6	8	10
			cents		
500	91.82	45.91	30.61	22.95	18.36
1,000	49.10	24.55	16.37	12.27	9.82
1,500	34.85	17.43	11.62	8.71	6.97
2,000	27.73	13.87	9.24	6.93	5.55
4,000	17.05	8.53	5.68	4.26	3.41
6,000	13.49	6.75	4.50	3.37	2.70
8,000	11.71	5.86	3.90	2.93	2.34
10,000	10.64	5.32	3.55	2.66	2.13
12,000	9.93	4.97	3.31	2.48	1.99
14,000	9.42	4.71	3.14	2.36	1.88
16,000	9.04	4.52	3.01	2.26	1.81
18,000	8.75	4.37	2.92	2.19	1.75
20,000	8.51	4.25	2.84	2.13	1.70
22,000	8.31	4.16	2.77	2.08	1.66
24,000	8.15	4.08	2.72	2.04	1.63
26,000	8.02	4.01	2.67	2.00	1.60
28,000	7.90	3.95	2.63	1.97	1.58
30,000	7.80	3.90	2.60	1.95	1.56

uming the truck was used only for livestock transportation during a 12-month period.
rce: Computed from Table 6 and Appendix Tables 1 through 4.

THE OPTIMUM MEANS OF LIVESTOCK TRANSPORTATION

The 1/2-ton truck was compared to the 1 1/2-ton truck on the basis of total per animal unit transported over a three-month period in order to determine optimum means of livestock transportation under different marketing nptions. This comparison considered a range in animal units transported ten to 50 and a range in miles per roundtrip to destination from 20 to 100 le 8). The comparison was based on total cost per animal unit transported

TABLE 8

Total Cost Per Animal Unit Transported By 1/2- and 1 1/2-Ton Trucks During A Three-Month Period Over Selected Round-Trip Miles With Selected Numbers of Animal Units Transported, West Virginia, 1970[a]

Round-Trip Mileage	Truck Size	Total Number of Animal Units Transport				
		10	20	30	40	5
20	1/2-Ton	$20.20	$10.60	$ 7.40	$ 5.80	$4
	1 1/2-Ton	21.66	10.96	7.38	5.62	4
40	1/2-Ton	21.20	11.60	8.40	6.80	5
	1 1/2-Ton	21.92	11.24	7.64	5.88	4
60	1/2-Ton	22.20	12.60	9.30	7.80	6
	1 1/2-Ton	22.14	11.46	7.92	6.12	5
80	1/2-Ton	23.20	13.60	10.40	8.80	8
	1 1/2-Ton	22.48	11.76	8.16	6.40	5
100	1/2-Ton	24.00	14.50	11.50	10.00	9
	1 1/2-Ton	22.70	12.00	8.40	6.70	5

[a] Assuming the truck will be utilized for other purposes during the off months. Sou Computed from Tables 1 and 3.

during the stated time period rather than on a cost per animal unit per mile b in order that an individual farmer could determine what it costs to transport livestock to its destination on either of the two model trucks.

It was assumed that each truck always carried its full capacity load (t animal units on the 1/2-ton truck and ten animal units on the 1 1/2-ton truc Therefore, when more than two animal units were assumed to be transported a 1/2-ton truck, the total cost per animal unit transported was based on m than one round trip to the destination. Similarly, when more than ten anir units were transported by a 1 1/2-ton truck, multiple round-trips w considered. For example, a farmer with a 1/2-ton truck transporting 20 anir units to a destination 20 miles away would have to make ten round trips total 400 miles. The total cost per animal unit transported in this case would $11.60 (Table 8). If the same farmer owned a 1 1/2-ton truck, however, o two round-trips or 80 miles of traveling would be necessary. The total cost in latter case would be $11.24.

Table 8 shows that for transporting 20 animal units or less a round-t distance of 20 miles or less or for transporting ten animal units or les round-trip distance of 40 miles or less, the 1/2-ton truck is more economi than the 1 1/2-ton truck. The 1 1/2-ton truck has the cost advantage for grea numbers of animal units transported greater distances.

Table 10

Total Costs Per Animal-Unit-Mile For A Three-Year-Old 1 1/2-Ton Truck Transporting Ten Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

al Miles ven Annually nsporting estock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	2.26	3.24	4.23	5.21	6.20	7.18
1,000	1.77	2.26	2.75	3.24	3.73	4.23
1,500	1.60	1.93	2.26	2.59	2.91	3.24
2,000	1.52	1.77	2.01	2.26	2.50	2.75
4,000	1.40	1.52	1.64	1.77	1.89	2.01
6,000	1.36	1.44	1.52	1.60	1.68	1.77
8,000	1.34	1.40	1.46	1.52	1.58	1.64
10,000	1.32	1.37	1.42	1.47	1.52	1.57
12,000	1.32	1.36	1.40	1.44	1.48	1.52
14,000	1.31	1.34	1.38	1.41	1.45	1.48
16,000	1.30	1.34	1.37	1.40	1.43	1.46
18,000	1.30	1.33	1.36	1.38	1.41	1.44
20,000	1.30	1.32	1.35	1.37	1.40	1.42
22,000	1.30	1.32	1.34	1.36	1.39	1.41
24,000	1.29	1.32	1.34	1.36	1.38	1.40
26,000	1.29	1.31	1.33	1.35	1.37	1.39
28,000	1.29	1.31	1.33	1.34	1.36	1.38
30,000	1.29	1.31	1.32	1.34	1.36	1.37

suming the truck will be utilized for other uses during off months. Source: Computed m Table 3 and Appendix Table 5.

Table 11

Total Costs Per Animal-Unit-Mile For A Five-Year-Old 1 1/2-Ton Truck Transporting Ten Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	2.00	2.72	3.44	4.16	4.88	5.61
1,000	1.63	2.00	2.36	2.72	3.08	3.44
1,500	1.51	1.76	2.00	2.24	2.48	2.72
2,000	1.45	1.63	1.82	2.00	2.18	2.36
4,000	1.36	1.45	1.54	1.63	1.73	1.82
6,000	1.33	1.39	1.45	1.51	1.57	1.63
8,000	1.32	1.36	1.41	1.45	1.50	1.54
10,000	1.31	1.35	1.38	1.42	1.45	1.49
12,000	1.30	1.33	1.36	1.39	1.42	1.45
14,000	1.30	1.33	1.35	1.38	1.40	1.43
16,000	1.30	1.32	1.34	1.36	1.39	1.41
18,000	1.29	1.31	1.33	1.35	1.37	1.39
20,000	1.29	1.31	1.33	1.35	1.36	1.38
22,000	1.29	1.31	1.32	1.34	1.36	1.37
24,000	1.29	1.30	1.32	1.33	1.35	1.36
26,000	1.29	1.30	1.32	1.33	1.34	1.36
28,000	1.29	1.30	1.31	1.33	1.34	1.35
30,000	1.29	1.30	1.31	1.32	1.33	1.35

[a] Assuming the truck will be utilized for other uses during off months. Source: Compu from Table 3 and Appendix Table 5.

Table 12

Total Costs Per Animal-Unit-Mile For A Seven-Year-Old 1 1/2-Ton Truck Transporting Ten Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

al Miles en Annually nsporting stock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	1.88	2.48	3.08	3.68	4.28	4.88
1,000	1.57	1.88	2.18	2.48	2.78	3.08
1,500	1.47	1.67	1.88	2.08	2.28	2.48
2,000	1.42	1.57	1.73	1.88	2.03	2.18
4,000	1.35	1.42	1.50	1.57	1.65	1.73
6,000	1.32	1.37	1.42	1.47	1.52	1.57
8,000	1.31	1.35	1.39	1.42	1.46	1.50
10,000	1.30	1.33	1.36	1.39	1.42	1.45
12,000	1.30	1.32	1.35	1.37	1.40	1.42
14,000	1.30	1.32	1.34	1.36	1.38	1.40
16,000	1.29	1.31	1.33	1.35	1.37	1.39
18,000	1.29	1.31	1.32	1.34	1.36	1.37
20,000	1.29	1.30	1.32	1.33	1.35	1.36
22,000	1.29	1.30	1.32	1.33	1.34	1.36
24,000	1.29	1.30	1.31	1.32	1.34	1.35
26,000	1.29	1.30	1.31	1.32	1.33	1.34
28,000	1.28	1.30	1.31	1.32	1.33	1.34
30,000	1.28	1.29	1.30	1.31	1.32	1.33

suming the truck will be utilized for other uses during off months. Source: Computed m Table 3 and Appendix Table 5.

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Total Miles Driven Annually Transporting Livestock	Months of Utilization											
	1	2	3	4	5	6	7	8	9	10	11	12
	cents											
500	6.75	10.31	13.87	17.42	20.99	24.55	28.11	31.67	35.23	38.79	42.35	45.91
1,000	4.97	6.75	8.53	10.31	12.09	13.87	15.65	17.43	19.21	20.99	22.77	24.55
1,500	4.37	5.56	6.75	7.93	9.12	10.31	11.49	12.68	13.87	15.05	16.24	17.43
2,000	4.08	4.97	5.86	6.75	7.64	8.53	9.42	10.31	11.20	12.09	12.98	13.87
4,000	3.63	4.08	4.52	4.97	5.41	5.86	6.30	6.75	7.19	7.64	8.08	8.53
6,000	3.48	3.78	4.08	4.37	4.67	4.97	5.26	5.56	5.86	6.15	6.45	6.75
8,000	3.41	3.63	3.85	4.08	4.30	4.52	4.74	4.97	5.19	5.41	5.63	5.86
10,000	3.36	3.54	3.72	3.90	4.08	4.25	4.43	4.61	4.79	4.97	5.14	5.32
12,000	3.33	3.48	3.63	3.78	3.93	4.08	4.22	4.37	4.52	4.67	4.82	4.97
14,000	3.31	3.44	3.57	3.69	3.82	3.95	4.08	4.20	4.33	4.46	4.58	4.71
16,000	3.30	3.41	3.52	3.63	3.74	3.85	3.97	4.08	4.19	4.30	4.41	4.52
18,000	3.29	3.38	3.48	3.58	3.68	3.78	3.88	3.98	4.08	4.18	4.27	4.37
20,000	3.28	3.36	3.45	3.54	3.63	3.72	3.81	3.90	3.99	4.08	4.17	4.25
22,000	3.27	3.35	3.43	3.51	3.59	3.67	3.75	3.83	3.91	4.00	4.08	4.16
24,000	3.26	3.33	3.41	3.48	3.56	3.63	3.71	3.78	3.85	3.93	4.00	4.08
26,000	3.25	3.32	3.39	3.46	3.53	3.60	3.67	3.73	3.80	3.87	3.94	4.01
28,000	3.25	3.31	3.38	3.44	3.50	3.57	3.63	3.69	3.76	3.82	3.89	3.95
30,000	3.25	3.30	3.36	3.42	3.48	3.54	3.60	3.66	3.72	3.78	3.84	3.90

[a]Assuming the truck will be utilized for other uses during off months. Source: Computed from Tables 1 and 3.

Table 3

Total Costs Per Animal-Unit-Mile For A 1 ½-Ton Truck Transporting Six Animal Units of Livestock For Periods of One Through Twelve Months Over Selected Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization											
	1	2	3	4	5	6	7	8	9	10	11	12
	cents											
500	4.50	6.87	9.24	11.61	13.99	16.37	18.74	21.11	23.49	25.86	28.23	30.61
1,000	3.31	4.50	5.68	6.87	8.06	9.24	10.43	11.62	12.80	13.99	15.18	16.37
1,500	2.92	3.71	4.50	5.29	6.08	6.87	7.66	8.45	9.24	10.04	10.83	11.62
2,000	2.72	3.31	3.90	4.50	5.09	5.68	6.28	6.87	7.46	8.06	8.65	9.24
4,000	2.42	2.72	3.01	3.31	3.61	3.90	4.20	4.50	4.79	5.09	5.39	5.68
6,000	2.32	2.52	2.72	2.92	3.11	3.31	3.51	3.71	3.90	4.10	4.30	4.50
8,000	2.27	2.42	2.57	2.72	2.87	3.01	3.16	3.31	3.46	3.61	3.76	3.90
10,000	2.24	2.36	2.48	2.60	2.72	2.84	2.95	3.07	3.19	3.31	3.43	3.55
12,000	2.22	2.32	2.42	2.52	2.62	2.72	2.82	2.92	3.01	3.11	3.21	3.31
14,000	2.21	2.29	2.38	2.46	2.55	2.63	2.72	2.80	2.89	2.97	3.06	3.14
16,000	2.20	2.27	2.35	2.42	2.50	2.57	2.64	2.72	2.79	2.87	2.94	3.01
18,000	2.19	2.26	2.32	2.39	2.45	2.52	2.59	2.65	2.72	2.78	2.85	2.92
20,000	2.18	2.24	2.30	2.36	2.42	2.48	2.54	2.60	2.66	2.72	2.78	2.84
22,000	2.18	2.23	2.29	2.34	2.39	2.45	2.50	2.56	2.61	2.66	2.72	2.77
24,000	2.17	2.22	2.27	2.32	2.37	2.42	2.47	2.52	2.57	2.62	2.67	2.72
26,000	2.17	2.22	2.26	2.31	2.35	2.40	2.44	2.49	2.53	2.58	2.63	2.67
28,000	2.17	2.21	2.25	2.29	2.34	2.38	2.42	2.46	2.51	2.55	2.59	2.63
30,000	2.16	2.20	2.24	2.28	2.32	2.36	2.40	2.44	2.48	2.52	2.56	2.60

Periods of One Through Twelve Months Over Selected Annual Mileages Used Annually [1971]

Total Miles Driven Annually Transporting Livestock	Months of Utilization											
	1	2	3	4	5	6	7	8	9	10	11	12
	cents											
500	3.37	5.15	6.93	8.71	10.49	12.27	14.05	15.83	17.61	19.39	21.17	22.95
1,000	2.48	3.37	4.26	5.15	6.04	6.93	7.82	8.71	9.60	10.49	11.38	12.27
1,500	2.19	2.78	3.37	3.97	4.56	5.15	5.75	6.34	6.93	7.53	8.12	8.71
2,000	2.04	2.48	2.93	3.37	3.82	4.26	4.71	5.15	5.60	6.04	6.49	6.93
4,000	1.82	2.04	2:26	2.48	2.71	2.93	3.15	3.37	3.60	3.82	4.04	4.26
6,000	1.74	1.89	2.04	2.19	2.33	2.48	2.63	2.78	2.93	3.08	3.22	3.37
8,000	1.70	1.82	1.93	2.04	2.15	2.26	2.37	2.48	2.59	2.71	2.82	2.93
10,000	1.68	1.77	1.86	1.95	2.04	2.13	2.22	2.31	2.39	2.48	2.57	2.66
12,000	1.67	1.74	1.82	1.89	1.96	2.04	2.11	2.19	2.26	2.33	2.41	2.48
14,000	1.66	1.72	1.78	1.85	1.91	1.97	2.04	2.10	2.17	2.23	2.29	2.36
16,000	1.65	1.70	1.76	1.82	1.87	1.93	1.98	2.04	2.09	2.15	2.21	2.26
18,000	1.64	1.69	1.74	1.79	1.84	1.89	1.94	1.99	2.04	2.09	2.14	2.19
20,000	1.64	1.68	1.73	1.77	1.82	1.86	1.90	1.95	1.99	2.04	2.08	2.13
22,000	1.63	1.67	1.71	1.75	1.80	1.84	1.88	1.92	1.96	2.00	2.04	2.08
24,000	1.63	1.67	1.70	1.74	1.78	1.82	1.85	1.89	1.93	1.96	2.00	2.04
26,000	1.63	1.66	1.70	1.73	1.76	1.80	1.83	1.87	1.90	1.94	1.97	2.00
28,000	1.62	1.66	1.69	1.72	1.75	1.78	1.82	1.85	1.88	1.91	1.94	1.97
30,000	1.62	1.65	1.68	1.71	1.74	1.77	1.80	1.83	1.86	1.89	1.92	1.95

[a]Assuming the truck will be utilized for other uses during off months. Source: Computed from Tables 1 and 3.

Table 5

Estimated Annual Fixed Costs For Transporting Livestock by 1 1/2-Ton Used Trucks of Different Ages in West Virginia, 1970

Fixed Cost Items	Age of Trucks in Years			
	1	3	5	
Depreciation[a]	$284.81	$244.21	$146.07	$10
Insurance[b]	135.40	135.40	135.40	13
Interest[c]	119.05	83.52	38.86	1
License Fee[d]	100.00	100.00	100.00	10
Property Tax[e]	39.16	27.47	12.78	
Total Fixed Cost	$678.42	$590.60	$433.11	$36

[a] Depreciation costs were computed by the straight line method on the basis of follo assumptions:

(1) The cost for one-, three-, five-, and seven-year-old trucks was obtaine considering the new cost of 1970,1968, 1966, and 1964 model trucks equipment including the V-8 engine in 1971. The cost for one-year-old trucks $3,132.86. For three-, five-, and seven-year-old trucks the cost was $2,19 $1,022.50 and $500.83, respectively. Source: *Truck Blue Book,* Official Used T Valuation, Effective January 1 — June 30, 1971. It was assumed that these costs no significant difference from the costs of buying 1969, 1967, 1965 and 1963 m trucks in 1970.

(2) The use life of 1 1/2-ton trucks was assumed to be 12 years.

[b] Insurance costs for the four different used trucks were assumed to be $135.40 a year. assumption was based on the data from: Robert L. Jack and Ahmad Abdul Kader, *Co Collecting Eggs from Farms by Firms Located in West Virginia,* West Virginia Unive Agricultural Experiment Station, Bulletin 571 (Morgantown, West Virginia: West Vir University, February, 1969), p. 34. The insurance costs for 1960 trucks and 1965 tr were both $127 a year in this study.

[c] Interest costs were computed at a rate of 7.6 per cent on the basis of mid-life value. mid-life value was assumed to be half of the retail value of the trucks at the t purchased.

[d] Source: *Schedule of Motor Vehicle Fees for All Classes,* State of West Virginia, John Gates, Commissioner, Department of Motor Vehicles, Effective July 1, 1970.

[e] Computed on basis of mid-life value of trucks at a tax rate of $2.50 per $100 appra value. Source: Data from State of West Virginia, Charles H. Haden II, Tax Commissio

Table 6

Total Costs Per Animal-Unit-Mile For A One-Year-Old 1 1/2-Ton Truck Transporting Two Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

t Miles n Annually porting ock	Months of Utilization					
	1	2	3	4	5	6
				cents		
500	12.02	17.68	23.33	28.98	34.64	40.29
1,000	9.20	12.02	14.85	17.68	20.50	23.33
1,500	8.25	10.14	12.02	13.91	15.79	17.68
2,000	7.78	9.20	10.61	12.02	13.44	14.85
4,000	7.08	7.78	8.49	9.20	9.90	10.61
6,000	6.84	7.31	7.78	8.25	8.73	9.20
8,000	6.72	7.08	7.43	7.78	8.14	8.49
10,000	6.65	6.94	7.22	7.50	7.78	8.07
12,000	6.61	6.84	7.08	7.31	7.55	7.78
14,000	6.57	6.77	6.98	7.18	7.38	7.58
16,000	6.55	6.72	6.90	7.08	7.25	7.43
18,000	6.53	6.68	6.84	7.00	7.16	7.31
20,000	6.51	6.65	6.79	6.94	7.08	7.22
22,000	6.50	6.63	6.76	6.88	7.01	7.14
24,000	6.49	6.61	6.72	6.84	6.96	7.08
26,000	6.48	6.59	6.70	6.80	6.91	7.02
28,000	6.47	6.57	6.67	6.77	6.87	6.98
30,000	6.46	6.56	6.65	6.75	6.84	6.94

ming the truck will be utilized for other uses during off months. Source: Computed Table 3 and Appendix Table 5.

Table 7

Total Costs Per Animal-Unit-Mile For A One-Year-Old 1 1/2-Ton Truck Transporting Four Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970 [a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization					
	1	2	3	4	5	
				cents		
500	6.01	8.84	11.67	14.49	17.32	20
1,000	4.60	6.01	7.43	8.84	10.25	11
1,500	4.13	5.07	6.01	6.95	7.90	8
2,000	3.89	4.60	5.31	6.01	6.72	7
4,000	3.54	3.89	4.24	4.60	4.95	5
6,000	3.42	3.66	3.89	4.13	4.36	4
8,000	3.36	3.54	3.71	3.89	4.07	4
10,000	3.33	3.47	3.61	3.75	3.89	4
12,000	3.30	3.42	3.54	3.66	3.77	3
14,000	3.29	3.39	3.49	3.59	3.69	3
16,000	3.27	3.36	3.45	3.54	3.63	3
18,000	3.26	3.34	3.42	3.50	3.58	3
20,000	3.26	3.33	3.40	3.47	3.54	3
22,000	3.25	3.31	3.38	3.44	3.51	3
24,000	3.24	3.30	3.36	3.42	3.48	3
26,000	3.24	3.29	3.35	3.40	3.46	3
28,000	3.24	3.29	3.34	3.39	3.44	3.
30,000	3.23	3.28	3.33	3.37	3.42	3.

[a] Assuming the truck will be utilized for other uses during off months. Source: Compu from Table 3 and Appendix Table 5.

Table 8

Total Costs Per Animal-Unit-Mile For A One-Year-Old 1 1/2-Ton Truck Transporting Six Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Miles n Annually porting tock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	4.01	5.89	7.78	9.66	11.55	13.43
1,000	3.07	4.01	4.95	5.89	6.83	7.78
1,500	2.75	3.38	4.01	4.64	5.26	5.89
2,000	2.59	3.07	3.54	4.01	4.48	4.95
4,000	2.36	2.59	2.83	3.07	3.30	3.54
6,000	2.28	2.44	2.59	2.75	2.91	3.07
8,000	2.24	2.36	2.48	2.59	2.71	2.83
10,000	2.22	2.31	2.41	2.50	2.59	2.69
12,000	2.20	2.28	2.36	2.44	2.52	2.59
14,000	2.19	2.26	2.33	2.39	2.46	2.53
16,000	2.18	2.24	2.30	2.36	2.42	2.48
18,000	2.18	2.23	2.28	2.33	2.39	2.44
20,000	2.17	2.22	2.26	2.31	2.36	2.41
22,000	2.17	2.21	2.25	2.29	2.34	2.38
24,000	2.16	2.20	2.24	2.28	2.32	2.36
26,000	2.16	2.20	2.23	2.27	2.30	2.34
28,000	2.16	2.19	2.22	2.26	2.29	2.33
30,000	2.15	2.19	2.22	2.25	2.28	2.31

ming the truck will be utilized for other uses during off months. Source: Computed Table 3 and Appendix Table 5.

Table 9

Total Costs Per Animal-Unit-Mile For A One-Year-Old 1 1/2-Ton Truck Transporting Eight Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization				
	1	2	3	4	5
	cents				
500	3.01	4.42	5.83	7.25	8.66
1,000	2.30	3.01	3.71	4.42	5.13
1,500	2.06	2.53	3.01	3.48	3.95
2,000	1.95	2.30	2.65	3.01	3.36
4,000	1.77	1.95	2.12	2.30	2.48
6,000	1.71	1.83	1.95	2.06	2.18
8,000	1.68	1.77	1.86	1.95	2.03
10,000	1.66	1.73	1.80	1.88	1.95
12,000	1.65	1.71	1.77	1.83	1.89
14,000	1.64	1.69	1.74	1.79	1.84
16,000	1.64	1.68	1.72	1.77	1.81
18,000	1.63	1.67	1.71	1.75	1.79
20,000	1.63	1.66	1.70	1.73	1.77
22,000	1.62	1.66	1.69	1.72	1.75
24,000	1.62	1.65	1.68	1.71	1.74
26,000	1.62	1.65	1.67	1.70	1.73
28,000	1.62	1.64	1.67	1.69	1.72
30,000	1.62	1.64	1.66	1.69	1.71

[a] Assuming the truck will be utilized for other uses during off months. Source: Com
from Table 3 and Appendix Table 5.

Table 10

Total Costs Per Animal-Unit-Mile For A Three-Year-Old 1 1/2-Ton Truck Transporting Two Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Miles n Annually porting ock	Months of Utilization					
	1	2	3	4	5	6
			cents			
500	11.29	16.21	21.13	26.06	30.98	35.90
1,000	8.83	11.29	13.75	16.21	18.67	21.13
1,500	8.01	9.65	11.29	12.93	14.57	16.21
2,000	7.60	8.83	10.06	11.29	12.52	13.75
4,000	6.99	7.60	8.22	8.83	9.45	10.06
6,000	6.78	7.19	7.60	8.01	8.42	8.83
8,000	6.68	6.99	7.29	7.60	7.91	8.22
0,000	6.62	6.86	7.11	7.35	7.60	7.85
2,000	6.57	6.78	6.99	7.19	7.40	7.60
4,000	6.55	6.72	6.90	7.07	7.25	7.42
6,000	6.52	6.68	6.83	6.99	7.14	7.29
8,000	6.51	6.64	6.78	6.92	7.05	7.19
0,000	6.49	6.62	6.74	6.86	6.99	7.11
2,000	6.48	6.59	6.71	6.82	6.93	7.04
4,000	6.47	6.57	6.68	6.78	6.88	6.99
6,000	6.46	6.56	6.65	6.75	6.84	6.94
8,000	6.46	6.55	6.63	6.72	6.81	6.90
0,000	6.45	6.53	6.62	6.70	6.78	6.86

ming the truck will be utilized for other uses during off months. Source: Computed Table 3 and Appendix Table 5.

Table 11

Total Costs Per Animal-Unit-Mile For A Three-Year-Old 1 1/2-Ton Truck Transporting Four Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization					
	1	2	3	4	5	
	cents					
500	5.65	8.11	10.57	13.03	15.49	1
1,000	4.42	5.65	6.88	8.11	9.34	1
1,500	4.01	4.83	5.65	6.47	7.29	
2,000	3.80	4.42	5.03	5.65	6.26	
4,000	3.49	3.80	4.11	4.42	4.72	
6,000	3.39	3.60	3.80	4.01	4.21	
8,000	3.34	3.49	3.65	3.80	3.95	
10,000	3.31	3.43	3.55	3.68	3.80	
12,000	3.29	3.39	3.49	3.60	3.70	
14,000	3.27	3.36	3.45	3.54	3.62	
16,000	3.26	3.34	3.42	3.49	3.57	
18,000	3.25	3.32	3.39	3.46	3.53	
20,000	3.25	3.31	3.37	3.43	3.49	
22,000	3.24	3.30	3.35	3.41	3.46	
24,000	3.24	3.29	3.34	3.39	3.44	
26,000	3.23	3.28	3.33	3.37	3.42	
28,000	3.23	3.27	3.32	3.36	3.40	
30,000	3.23	3.27	3.31	3.35	3.39	

[a] Assuming the truck will be utilized for other uses during off months. Source: Com
from Table 3 and Appendix Table 5.

Table 12

Total Costs Per Animal-Unit-Mile For A Three-Year-Old 1 1/2-Ton Truck Transporting Six Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

l Miles en Annually sporting stock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	3.76	5.40	7.04	8.69	10.33	11.97
1,000	2.94	3.76	4.58	5.40	6.22	7.04
1,500	2.67	3.22	3.76	4.31	4.86	5.40
2,000	2.53	2.94	3.35	3.76	4.17	4.58
4,000	2.33	2.53	2.74	2.94	3.15	3.35
6,000	2.26	2.40	2.53	2.67	2.81	2.94
8,000	2.23	2.33	2.43	2.53	2.64	2.74
10,000	2.21	2.29	2.37	2.45	2.53	2.62
12,000	2.19	2.26	2.33	2.40	2.47	2.53
14,000	2.18	2.24	2.30	2.36	2.42	2.47
16,000	2.17	2.23	2.28	2.33	2.38	2.43
18,000	2.17	2.21	2.26	2.31	2.35	2.40
20,000	2.16	2.21	2.25	2.29	2.33	2.37
22,000	2.16	2.20	2.24	2.27	2.31	2.35
24,000	2.16	2.19	2.23	2.26	2.29	2.33
26,000	2.15	2.19	2.22	2.25	2.28	2.31
28,000	2.15	2.18	2.21	2.24	2.27	2.30
30,000	2.15	2.18	2.21	2.23	2.26	2.29

ming the truck will be utilized for other uses during off months. Source: Computed o Table 3 and Appendix Table 5.

Table 13

Total Costs Per Animal-Unit-Mile For A Three-Year-Old 1 1/2-Ton Truck Transporting Eight Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization				
	1	2	3	4	5
			cents		
500	2.82	4.05	5.28	6.51	7.74
1,000	2.21	2.82	3.44	4.05	4.67
1,500	2.00	2.41	2.82	3.23	3.64
2,000	1.90	2.21	2.52	2.82	3.13
4,000	1.75	1.90	2.05	2.21	2.36
6,000	1.70	1.80	1.90	2.00	2.11
8,000	1.67	1.75	1.82	1.90	1.98
10,000	1.65	1.72	1.78	1.84	1.90
12,000	1.64	1.70	1.75	1.80	1.85
14,000	1.64	1.68	1.72	1.77	1.81
16,000	1.63	1.67	1.71	1.75	1.78
18,000	1.63	1.66	1.70	1.73	1.76
20,000	1.62	1.65	1.68	1.72	1.75
22,000	1.62	1.65	1.68	1.70	1.73
24,000	1.62	1.64	1.67	1.70	1.72
26,000	1.62	1.64	1.66	1.69	1.71
28,000	1.61	1.64	1.66	1.68	1.70
30,000	1.61	1.63	1.65	1.67	1.70

[a] Assuming the truck will be utilized for other uses during off months. Source: Com from Table 3 and Appendix Table 5.

Table 14

Total Costs Per Animal-Unit-Mile For A Five-Year-Old 1 1/2-Ton Truck Transporting Two Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Miles Annually orting ock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	9.98	13.59	17.20	20.81	24.42	28.03
1,000	8.17	9.98	11.78	13.59	15.39	17.20
1,500	7.57	8.78	9.98	11.18	12.39	13.59
2,000	7.27	8.17	9.08	9.98	10.88	11.78
4,000	6.82	7.27	7.72	8.17	8.63	9.08
6,000	6.67	6.97	7.27	7.57	7.87	8.17
8,000	6.60	6.82	7.05	7.27	7.50	7.72
0,000	6.55	6.73	6.91	7.09	7.27	7.45
2,000	6.52	6.67	6.82	6.97	7.12	7.27
4,000	6.50	6.63	6.76	6.89	7.01	7.14
6,000	6.48	6.60	6.71	6.82	6.93	7.05
8,000	6.47	6.57	6.67	6.77	6.87	6.97
0,000	6.46	6.55	6.64	6.73	6.82	6.91
2,000	6.45	6.53	6.62	6.70	6.78	6.86
4,000	6.45	6.52	6.60	6.67	6.75	6.82
6,000	6.44	6.51	6.58	6.65	6.72	6.79
8,000	6.43	6.50	6.56	6.63	6.69	6.76
0,000	6.43	6.49	6.55	6.61	6.67	6.73

ning the truck will be utilized for other uses during off months. Source: Computed Table 3 and Appendix Table 5.

Table 15

Total Costs Per Animal-Unit-Mile For A Five-Year-Old 1 1/2-Ton Truck Transporting Four Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	4.99	6.79	8.60	10.40	12.21	14
1,000	4.09	4.99	5.89	6.79	6.70	
1,500	3.79	4.39	4.99	5.59	6.19	
2,000	3.64	4.09	4.54	4.99	5.44	
4,000	3.41	3.64	3.86	4.09	4.31	
6,000	3.34	3.49	3.64	3.79	3.94	
8,000	3.30	3.41	3.52	3.64	3.75	
10,000	3.28	3.37	3.46	3.55	3.64	
12,000	3.26	3.34	3.41	3.49	3.56	
14,000	3.25	3.31	3.38	3.44	3.51	
16,000	3.24	3.30	3.35	3.41	3.47	
18,000	3.24	3.29	3.34	3.39	3.44	
20,000	3.23	3.28	3.32	3.37	3.41	
22,000	3.23	3.27	3.31	3.35	3.39	
24,000	3.22	3.26	3.30	3.34	3.37	
26,000	3.22	3.25	3.29	3.32	3.36	
28,000	3.22	3.25	3.28	3.31	3.35	
30,000	3.22	3.25	3.28	3.31	3.34	

[a] Assuming the truck will be utilized for other uses during off months. Source: Comp from Table 3 and Appendix Table 5.

Table 16

Total Costs Per Animal-Unit-Mile For A Five-Year-Old 1 1/2-Ton Truck Transporting Six Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Miles n Annually porting tock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	3.33	4.53	5.73	6.94	8.14	9.34
1,000	2.72	3.33	3.93	4.53	5.13	5.73
1,500	2.52	2.93	3.33	3.73	4.13	4.53
2,000	2.42	2.72	3.03	3.33	3.63	3.93
4,000	2.27	2.42	2.57	2.72	2.88	3.03
6,000	2.22	2.32	2.42	2.52	2.62	2.72
8,000	2.20	2.27	2.35	2.42	2.50	2.57
10,000	2.18	2.24	2.30	2.36	2.42	2.48
12,000	2.17	2.22	2.27	2.32	2.37	2.42
14,000	2.17	2.21	2.25	2.30	2.34	2.38
16,000	2.16	2.20	2.24	2.27	2.31	2.35
18,000	2.16	2.19	2.22	2.26	2.29	2.32
20,000	2.15	2.18	2.21	2.24	2.27	2.30
22,000	2.15	2.18	2.21	2.23	2.26	2.29
24,000	2.15	2.17	2.20	2.22	2.25	2.27
26,000	2.15	2.17	2.19	2.22	2.24	2.26
28,000	2.14	2.17	2.19	2.21	2.23	2.25
30,000	2.14	2.16	2.18	2.20	2.22	2.24

ıming the truck will be utilized for other uses during off months. Source: Computed n Table 3 and Appendix Table 5.

Table 17

Total Costs Per Animal-Unit-Mile For A Five-Year-Old 1 1/2-Ton Truck Transporting Eight Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization				
	1	2	3	4	5
	cents				
500	2.49	3.40	4.30	5.20	6.10
1,000	2.04	2.49	2.95	3.40	3.85
1,500	1.89	2.19	2.49	2.80	3.10
2,000	1.82	2.04	2.27	2.49	2.72
4,000	1.71	1.82	1.93	2.04	2.16
6,000	1.67	1.74	1.82	1.89	1.97
8,000	1.65	1.71	1.76	1.82	1.87
10,000	1.64	1.68	1.73	1.77	1.82
12,000	1.63	1.67	1.71	1.74	1.78
14,000	1.62	1.66	1.69	1.72	1.75
16,000	1.62	1.65	1.68	1.71	1.73
18,000	1.62	1.64	1.67	1.69	1.72
20,000	1.62	1.64	1.66	1.68	1.71
22,000	1.61	1.63	1.65	1.67	1.70
24,000	1.61	1.63	1.65	1.67	1.69
26,000	1.61	1.63	1.64	1.66	1.68
28,000	1.61	1.62	1.64	1.66	1.67
30,000	1.61	1.62	1.64	1.65	1.67

[a] Assuming the truck will be utilized for other uses during off months. Source: Comp from Table 3 and Appendix Table 5.

Table 18

Total Costs Per Animal-Unit-Mile For A Seven-Year-Old 1 1/2-Ton Truck Transporting Two Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Miles Annually orting ock	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	9.38	12.38	15.39	18.40	21.41	24.41
1,000	7.87	9.38	10.88	12.38	13.89	15.39
1,500	7.37	8.37	9.38	10.38	11.38	12.38
2,000	7.12	7.87	8.63	9.38	10.13	10.88
4,000	6.75	7.12	7.50	7.87	8.25	8.63
6,000	6.62	6.87	7.12	7.37	7.62	7.87
8,000	6.56	6.75	6.93	7.12	7.31	7.50
0,000	6.52	6.67	6.82	6.97	7.12	7.27
2,000	6.50	6.62	6.75	6.87	7.00	7.12
4,000	6.48	6.58	6.69	6.80	6.91	7.01
6,000	6.46	6.56	6.65	6.75	6.84	6.93
8,000	6.45	6.54	6.62	6.70	6.79	6.87
0,000	6.45	6.52	6.60	6.67	6.75	6.82
2,000	6.44	6.51	6.57	6.64	6.71	6.78
4,000	6.43	6.50	6.56	6.62	6.68	6.75
6,000	6.43	6.49	6.54	6.60	6.66	6.72
8,000	6.42	6.48	6.53	6.58	6.64	6.69
0,000	6.42	6.47	6.52	6.57	6.62	6.67

ning the truck will be utilized for other uses during off months. Source: Computed Table 3 and Appendix Table 5.

Table 19

Total Costs Per Animal-Unit-Mile For A Seven-Year-Old 1 1/2-Ton Truck Transporting Four Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization					
	1	2	3	4	5	
	cents					
500	4.69	6.19	7.70	9.20	10.70	12
1,000	3.94	4.69	5.44	6.19	6.94	7
1,500	3.69	4.19	4.69	5.19	5.69	6
2,000	3.56	3.94	4.31	4.69	5.06	5
4,000	3.37	3.56	3.75	3.94	4.12	4
6,000	3.31	3.44	3.56	3.69	3.81	3
8,000	3.28	3.37	3.47	3.56	3.65	3
10,000	3.26	3.34	3.41	3.49	3.56	3
12,000	3.25	3.31	3.37	3.44	3.50	3
14,000	3.24	3.29	3.35	3.40	3.45	3
16,000	3.23	3.28	3.33	3.37	3.42	3
18,000	3.23	3.27	3.31	3.35	3.39	3
20,000	3.22	3.26	3.30	3.34	3.37	3
22,000	3.22	3.25	3.29	3.32	3.36	3
24,000	3.22	3.25	3.28	3.31	3.34	3
26,000	3.21	3.24	3.27	3.30	3.33	3
28,000	3.21	3.24	3.27	3.29	3.32	3
30,000	3.21	3.24	3.26	3.29	3.31	3

[a] Assuming the truck will be utilized for other uses during off months. Source: Compu from Table 3 and Appendix Table 5.

Table 20

Total Costs Per Animal-Unit-Mile For A Seven-Year-Old 1 1/2-Ton Truck Transporting Six Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

iles Annually rting k	Months of Utilization					
	1	2	3	4	5	6
	cents					
500	3.13	4.13	5.13	6.13	7.14	8.14
,000	2.62	3.13	3.63	4.13	4.63	5.13
,500	2.46	2.79	3.13	3.46	3.79	4.13
,000	2.37	2.62	2.88	3.13	3.38	3.63
,000	2.25	2.37	2.50	2.62	2.75	2.88
,000	2.21	2.29	2.37	2.46	2.54	2.62
,000	2.19	2.25	2.31	2.37	2.44	2.50
,000	2.17	2.22	2.27	2.32	2.37	2.42
,000	2.17	2.21	2.25	2.29	2.33	2.37
,000	2.16	2.19	2.23	2.27	2.30	2.34
,000	2.15	2.19	2.22	2.25	2.28	2.31
,000	2.15	2.18	2.21	2.23	2.26	2.29
,000	2.15	2.17	2.20	2.22	2.25	2.27
,000	2.15	2.17	2.19	2.21	2.24	2.26
,000	2.14	2.17	2.19	2.21	2.23	2.25
,000	2.14	2.16	2.18	2.20	2.22	2.24
,000	2.14	2.16	2.18	2.19	2.21	2.23
,000	2.14	2.16	2.17	2.19	2.21	2.22

ng the truck will be utilized for other uses during off months. Source: Computed able 5 and Appendix Table 5.

Table 21

Total Costs Per Animal-Unit-Mile For A Seven-Year-Old 1 1/2-Ton Truck Transporting Eight Animal Units of Livestock For Selected Months of Use and Annual Mileages, West Virginia, 1970[a]

Total Miles Driven Annually Transporting Livestock	Months of Utilization				
	1	2	3	4	5
	cents				
500	2.34	3.10	3.85	4.60	5.35
1,000	1.97	2.34	2.72	3.10	3.47
1,500	1.84	2.09	2.34	2.59	2.85
2,000	1.78	1.97	2.16	2.34	2.53
4,000	1.69	1.78	1.87	1.97	2.06
6,000	1.66	1.72	1.78	1.84	1.91
8,000	1.64	1.69	1.73	1.78	1.83
10,000	1.63	1.67	1.71	1.74	1.78
12,000	1.62	1.66	1.69	1.72	1.75
14,000	1.62	1.65	1.67	1.70	1.73
16,000	1.62	1.64	1.66	1.69	1.71
18,000	1.61	1.63	1.66	1.68	1.70
20,000	1.61	1.63	1.65	1.67	1.69
22,000	1.61	1.63	1.64	1.66	1.68
24,000	1.61	1.62	1.64	1.66	1.67
26,000	1.61	1.62	1.64	1.65	1.66
28,000	1.61	1.62	1.63	1.65	1.66
30,000	1.61	1.62	1.63	1.64	1.66

[a] Assuming the truck will be utilized for other uses during off months. Source: Com from Table 3 and Appendix Table 5.